

IN THE CLAIMS:

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Box

1. (CURRENTLY AMENDED) An optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

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a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged ~~on~~in the light path from the light sources to the photodetector by way of ~~the two pieces~~one of the first or second type of optical recording medium;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

2. (CURRENTLY AMENDED) An optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the

second wavelength, whichever appropriate;

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a photodetector for detecting the light beam ~~foeussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged on the light path from the light sources to the photodetector by way of ~~the two pieces~~ one of the first or second type of optical recording medium;

each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~foeussed~~focused to a same spot n the light receiving surface of the photodetector.

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9. (CURRENTLY AMENDED) An optical disc device comprising:

a rotary operating mechanism for driving one or more than one optical discs operating so many pieces of optical recording medium as to rotate; and

an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism;

said optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

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a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

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a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged on the light path from the light sources to the photodetector by way of ~~the two pieces~~one of the first or second type of optical recording medium;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

10. (CURRENTLY AMENDED) An optical disc device comprising:

a rotary operating mechanism for driving one or more than one optical discs operating so many pieces of optical recording medium as to rotate; and

an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism;

said optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to

the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged on the light path from the light sources to the photodetector by way of ~~the two pieces~~ one of the first or second type of optical recording medium;

each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

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17. (NEW) The optical pickup device of claim 1, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.

18. (NEW) The optical pickup device of claim 1 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.

19. (NEW) The optical pickup device of claim 18, wherein the diffraction grating pattern is a blazed grating design.

20. (NEW) The optical pickup device of claim 2, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.

21. (NEW) The optical pickup device of claim 2 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.

22. (NEW) The optical pickup device of claim 21, wherein the diffraction grating pattern is a blazed grating design.

23. (NEW) The optical pickup device of claim 9, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.

24. (NEW) The optical pickup device of claim 9 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.

25. (NEW) The optical pickup device of claim 24, wherein the diffraction grating pattern is a blazed grating design.

26. (NEW) The optical pickup device of claim 10, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.

27. (NEW) The optical pickup device of claim 10, wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.

28. (NEW) The optical pickup device of claim 27, wherein the diffraction grating pattern is a blazed grating design.

29. (NEW) An optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged on the light path from the light sources to the photodetector by way of the two pieces of optical recording medium, wherein the diffraction element is a single plate having opposite side surfaces and a diffraction grating formed on at least one of the opposite side surfaces;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being focused to a same spot on the light receiving surface of the photodetector.
